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### REMARKS/ARGUMENTS

### Specification Amendments

In the specification, paragraphs [0028] and [0036] of the U.S. Patent Application Publication No. 2006/0189696 would be amended to correct minor informalities, and the paragraph at page 9 would be amended to render it consistent with the application as filed.

Figure 2 would be amended, as indicated in the enclosed Annotated Sheet of that Figure, i.e., structures of retinoids of Figure 2 are labeled  $R^1$ - $R^6$  for consistency with the specification, considered as a whole, e.g., Figure 3.

### Telephone Interviews

Applicants' undersigned representative held two telephone interviews with the Examiner on July 8 and 9, 2008, during which Applicants proposed some of the amendments of claim 1, set forth above. The Examiner said that the proposed claim amendments would render all claims allowable, subject to the approval of his supervisor. Applicants appreciate the Examiner's attention to this application.

In a telephone conversation with the Examiner on May 22, 2008, the representative asked if the Examiner would consider a supplemental Information Disclosure Statement, including full copies of Kuksa et al. and BLAGBROUGH, IAN S. et al., Polyamines and Polyamine Amides as Potent Selective Receptor Probes, Novel Therapeutic Lead Compounds and Synthetic Vectors in Gene Therapy, Pharmaceutical Sciences, 1997, 3; 223-233, and an English translation or meaningful Abstract of TSAMBAOS, DIONYSIOS. All three of these references were cited in the IDS filed on March 21, 2008. The Examiner advised he would consider such IDS. Since it is unclear if the Supplemental IDS filed on September 12, 2008 was entered into the record, Applicants enclose a copy of that Supplemental IDS including the documents listed in it and respectfully request consideration thereof, and an indication it was considered by returning to the undersigned counsel a copy of the form PTO/SB/08 a with the Examiner's initials.

The Examiner and Counsel further discussed claims a few days prior to October 20, on October 20 and 23, 2008. The Examiner suggested:

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- A) Amendment of claim 1 to recite the removal of the COOH group from the acidic retinoids shown in that claim;
  - B) Deletion of "general" in claim 2, line 3;
- C) Addition in Claim 7 of "and a pharmaceutically acceptable carrier" and deletion of "for therapeutical applications in humans".
  - D) in claim 2 insertion of full chemical names of the abbreviations HOSu, DCC and PyBrOP;
  - E) deletion of the redundant colon in claim 9.

The Examiner advised that he believed such amendments should place all claims in condition for allowance, pending approval of his supervisor.

#### Claim Amendments

By the amendments presented, Claim 1 would be rewritten to delete the language "having pharmaceutical properties," and "of the acyl group(s) RCO." Further by the amendment presented, Claim 1 would be rewritten to delete the language "and polyene chain-shortened all-trans-retinoic acid analogues," and to add "the retinoid residues obtained by removing the COOH group from each of the following acidic retinoids". Several other claims would be amended to correct informalities and/or as suggested by the Examiner to address objections set forth in the Advisory Action and pursuant to telephone interviews between the undersigned Counsel and the Examiner, summarized above.

While Applicants respectfully submit that all claims, prior to their amendments herein, were patentable, in the interest of expediting prosecution Applicants followed the Examiner's suggestions expressed during the phone calls with counsel in October 2008. Applicants appreciate the Examiner's attention to this application, and his helpful suggestions.

Applicants respectfully submit that the claim amendments are supported by the specification, considered as a whole, e.g., claim 1 amendments are supported by Fig. 3 and page 6, paragraphs 0028 and 0029 of U.S. Patent Application Publication 2006/0189696. With respect to claim 7, Applicants respectfully point out that this claim was definite prior to the amendment thereof in this paper, at least because persons of ordinary skill in the art would have readily understood the metes and bounds of the scope of that claim, and that the conjugate recited in that claim is the active ingredient. Nonetheless, in the interest of expediting prosecution, Applicants

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amended claim 7, consistent with the Examiner's suggestion. Persons of ordinary skill in the art are aware of the types of pharmaceutically acceptable carriers known in the art that can be used for various active ingredients e.g., see WO 02/24185, which, though directed to aliphatic polyamines as topical analgesics, discusses pharmaceutically acceptable carriers, e.g., page 4, lines 8-11 and page 5, lines 11-19 (copy enclosed for the Examiner's convenience).

By the amendment of Claim 2, sub-paragraph c) would be amended to recite "trifluoroacetyl group", for consistency with claim 5, and similarly claim 5, sub-paragraph (i), would be amended to recite "9-fluorenylmethoxycarbonyl group" for consistency with claim 2 (from which claim 5 depends). The amendment of claim 2, sub-paragraph c) "amino groups functions" is made for consistency, e.g., see the succeeding line of that claim, and it does not change the substance or scope of the claim.

Claim amendments are further supported by the specification, considered as a whole, e.g.; see page 2, paragraph [0008], paragraphs [0021], [0025] [0028] and [0029] of U.S. Patent Application Publication No. 2006/0189696. New claims 8 and 9 are based on claims 3 and 5. The specification and claim amendments and new claims would not introduce new issues and entry thereof into the record is respectfully solicited. Upon entry of the claim amendments presented herein, Claims 1-9 would remain in the application.

Applicants note the indication in the Advisory Action that a reason for the non-entry of the proposed amendments filed in the September 12<sup>th</sup> Amendment, was that they presented additional claims without canceling a corresponding number of finally rejected claims. Applicants respectfully reiterate that claims 8 and 9 are directed to the subject matter previously present in claims 3 and 5, respectively. Thus, claims 8 and 9 do not introduce new issues and do not necessitate additional search.

For all the reasons discussed in this paper, Applicants respectfully request entry into the record of all the amendments set forth in this paper.

# Oath/Declaration

The Examiner has asserted the oath to be defective. The Examiner contends that item (2) of 37 C.F.R. § 1.47(a) is not satisfied, because Applicants have not submitted enough evidence to constitute a written refusal.

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The oath is corrected to satisfy item (2) of 37 C.F.R. § 1.47(a), because Applicants submitted sufficient evidence to establish an informed refusal by Dr. Tsambaos, an inventor, to join in the application. *See* the Request for Reconsideration of the Decision on Petition Under 37 C.F.R. 1.47 (a) (Filing When An Inventor Refuses To Sign) and Renewed Petition Under 37 C.F.R. §1.47 (a) filed on August 4, 2008 and the October 3, 2008 Decision granting the Renewed Petition.

### Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 1-7 have been finally rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The Examiner contends that each of the R groups is not an acidic or retinoic residue, but an alkenyl group. The Examiner further contends that Claim 1 contains functional language ("having pharmaceutical properties") which renders the claim unclear as to whether it is a compound or a composition claim. Such a rejection is respectfully traversed.

Applicants respectfully submit that Claims 1-7 were definite prior to the amendments herein, because persons of ordinary skill in the art would have been able to easily understand the metes and bounds of the subject matter of the claims. However, in the interest of expediting prosecution, Applicants amended Claim 1 to address the Examiner's concerns. By the amendments presented, Claim 1 would be rewritten to delete the language "having pharmaceutical properties." Although one of ordinary skill in the art would recognize that each R group of Claim 1 is a retinoid residue, Claim 1 would be rewritten to delete the language "of the acyl group(s) RCO."

Further by the amendment presented, Claim 1 would be rewritten to delete the language "and polyene chain-shortened all-trans-retinoic acid analogues." The acidic retinoids as described, for example, in paragraph [0028] of the U.S. Patent Application Publication No. 2006/0189696, inter alia, include polyene chain-shortened all-trans-retinoic acid analogues and all trans-retinoic acid. It would seem redundant to repeat this language in Claim 1. Therefore, all acidic retinoids of Figure 2 and retinoid residues as defined in the claims and specification of the U.S. Patent Application Publication No. 2006/0189696 would continue to be covered by the herein - amended claim 1.

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For all the reasons set forth above, it is respectfully submitted that amended Claims 1-7, and new claims 8, 9, would continue to be definite. Therefore, withdrawal of the rejection of the claims under 35 U.S.C. § 112, second paragraph, is respectfully solicited.

### Restriction Requirement

Applicants note an implicit rejoinder during prosecution of Group IV with Group I, as these two Groups were defined in the Office Action of July 20, 2007. In particular, in the July 20, 2007 Office Action, the Examiner required that Applicants elect for prosecution one of the following groups of claims:

Group I, claims 1-7 drawn to compounds, compounds and methods wherein variables as R1, R3, R4, R5, or R6 as defined in claim 1 and the polyamine is chosen from section A or D of claim 1.

Group II, claims 1-7, drawn to compounds, compounds and methods wherein variables as R1, R3, R4, R5, or R6 as defined in claim 1 and the polyamine is chosen from section B of claim 1.

Group III, claims 1-7, drawn to compounds, compounds and methods wherein variables as R1, R3, R4, R5, or R6 as defined in claim 1 and the polyamine is chosen from section C of claim 1.

Group IV, claims 1-7 drawn to compounds and compositions, wherein variable R is defined as R<sup>2</sup> as defined in claim 1 and the polyamine is chosen from section A or D of claim 1.

Group V, claims 1-7, drawn to compounds and compositions, wherein variable R is defined as R<sup>2</sup> as defined in claim 1 and the polyamine is chosen from section B of claim 1.

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Group VI, claims 1-7, drawn to compounds and compositions, wherein variable R is defined as R<sup>2</sup> as defined in claim 1 and the polyamine is chosen from section C of claim 1.

Office Action, pages 1-2.

In response to the July 20, 2007 Office Action, Applicants respectfully disagreed and traversed the Restriction Requirement. In order to be fully responsive to the Restriction Requirement, Applicants elected the subject matter of Group I for prosecution on the merits, represented by claims 1-7 compounds, compounds and methods, where variables  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ , or  $R^6$  were as defined in claim 1 and the polyamine was selected from section a) or d) of claim 1.

In a Response and Amendment Under 37 C.F.R. §1.111 to Non-Final Office Action and Petition For One Month Extension Of Time filed on January 17, 2008, responsive to the Office Action of September 17, 2007, Applicants deleted from claim 1 the non-elected sub-parts b) and c) of claim 1, but inadvertently retained all six retinoid residues, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup>. As noted above, residue R<sup>2</sup> (along with sub-parts a) or d) )) was included in the Restriction Requirement in Group IV.

Claim 1 including retinoid residues  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^6$  (along with all other pending claims) was examined on the merits in the Office Action of May 12, 2008. Thus, Group IV was rejoined with Group I.

Since Groups I and IV were examined, the examination did not involve undue burden.

Applicants respectfully request that Groups I and IV continue to be included in prosecution of the application.

## CONCLUSIONS

Applicants have made an earnest effort to place their application in condition for allowance. WHEREFORE, reconsideration of this application, entry of the claim amendments presented, at least withdrawal of the finality of the instant Office Action, but more preferably

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also complete withdrawal of the claims rejection under 35 U.S.C. §112, second paragraph, and allowance of Claims 1-9, are respectfully requested. Alternatively, entry of the amendments presented herein in order to place the claims in better form for appeal is respectfully requested.

It is also respectfully requested that the Examiner expeditiously notify Applicants' undersigned attorney as to the disposition of the amendments and arguments presented herein in accordance with MPEP §714.13. If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated, since this should expedite the prosecution of the application for all concerned.

An indication of allowance of all claims is respectfully requested.

Authorization is hereby granted to charge or credit the undersigned's Deposit Account No. 50-2478 for any fees or overpayments, including extension of time fees, related to the entry of this Amendment.

Respectfully submitted.

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November 5, 2008